Remarks

In light of the amendments and remarks presented herein, favorable reconsideration and allowance are respectfully requested. By this amendment, claims 1, 3, 9, 14-15, 26, 33, 37-38, 53, 55, 56, 60 and 67 have been amended. Claims 4-6, 19-20, 48-52 and 54 have been cancelled, and claims 71-76 have been added. Claims 1, 3, 7-18, 21-47, 53, and 55-76 are pending for examination.

Claims 3 and 9 are objected to as their dependency is improper. Applicant has amended claims 3 and 9 so that they refer properly to independent claim 1 and requests withdrawal of the objection.

Claims 48-66 stand rejected under 35 U.S.C. §101 as being allegedly directed to non-statutory subject matter. Claims 48-52 have been cancelled and claims 53-66 have been amended to recite "a machine-readable storage medium." Applicant submits that "machine-readable storage medium" recites proper structure in accordance with MPEP 2106.01. Thus, claims 53-66 are allowable under 35 U.S.C. §101.

Claims 1, 3-6, 8-10, 13-21, 23, 25-30, 33-45, 47-56, 58-60, 62-63 and 65-70 stand rejected under 35 U.S.C §102(b) as being anticipated by Kawata et al. (U.S. App. 2002/0032777). Applicant submits that Kawata does not teach or suggest all elements of these claims as amended.

For example, claim 1 recites, *inter alia*, "wherein the one or more load balancing routines encode the collected proportional server capability information in a weighted distribution that represents the plurality of servers in a weighted manner based at least in part on the proportional server capability information." This element is not taught or suggested by Kawata. According to the Examiner, "Kawata et al shows test service packets are sent to servers which are processed and returned providing information to the load balancer to load balance requests from clients which is repeated throughout and a load balancer generates capability information of the group of servers based on the measured load of the servers.

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Applicant respectfully submits that the Examiner's generalization of the teachings of Kawata does not teach the claimed limitations. For example, there is no teaching or suggestion is Kawata of a "weighted distribution that represents the plurality of servers in a weighted manner based at least in part on the proportional server capability information." Kawata teaches that each server is assigned a load evaluation value. [0058]. Kawata does not teach or suggest however, that the server values are distributed in "a weighted distribution that represents the plurality of servers in a weighted manner based at least in part on the proportional server capability information. "

Although the load evaluation values may vary from server to server, there is no teaching or suggestion in Kawata that "the one or more load balancing routines encode the collected proportional server capability information in a weighted distribution that represents the plurality of servers in a weighted manner based at least in part on the proportional server capability information." Kawata neither teaches nor suggests a "representation" in any weighted distribution of the proportional server capability of each of the plurality of servers.

In response to a similar argument presented previously, the Examiner replies "Kawata shows load balancing by analyzing the load of the server in the group and then selecting a server based on the lowest evaluation value with respect to the group of servers as a whole." Applicant respectfully submits that, even if this statement by the Examiner is factually accurate, it fails to show a "proportionate" evaluation of the servers. An illustrative non-limiting example of a proportionate evaluation or representation of server capability can be see in Applicant's disclosure paragraph [1039]. Although this is just one example, it can be seen that Applicant's system evaluates the proportionate (e.g., relative to the whole group of servers) capabilities of a server. In Kawata, the discrete power of each server is calculated and assigned a value. Even if these comparative values <u>could</u> be used to calculate <u>proportionate</u> values, Kawata provides no teaching or even incentive to do so.

Independent claims 14, 37, and 67 contain recitations similar to those of claim 1 and should be allowable at least for similar reasons. Claims 3, 8-10, 15-21, 23, 25, 38-45, 47-52, 68-70 should be allowable based on their dependency from allowable independent claims.

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Claim 18 recites, *inter alia*, "randomly selecting entries from the encoding." According to the Examiner, "Kawata et al shows the selection is based on a round robin or pseudo-random fashion." First, Applicant notes that Kawata does not teach or suggest pseudo-random selection. Round robin selection is selection in sequential order, skipping those servers that have a value above a designated threshold, as is seen by Kawata paragraph [0067]. Further, even if Kawata did teach pseudo-random selection, pseudo-random selection is not random. In fact, the dictionary definition of pseudo includes "false; and pretended" thus indicating that pseudo-random is, in fact, by definition not random. For at least this reason, claim 18 should be allowable.

Claim 26 recites, *inter alia*, "encoding that reflects proportional capabilities of the plurality of servers in relation to the capabilities of all the servers collectively." Claim 53 contains a similar recitation.

As with claims 1, 14, 37 and 67 *supra*, claims 26 and 53 teach an encoding representing proportional capabilities of servers. Claims 26 and 53 additionally require that the encoding reflect the proportional capabilities in relation to the capabilities of all servers collectively. As previously noted, *supra*, this is not taught or suggested by Kawata. For at least this reason, Applicant submits that claims 26 and 53 are allowable over the prior art of record. Claims 27-30, 33-36, 54-56, and 58-59 should be allowable based at least on their dependency from allowable independent claims.

Claim 33 recites, *inter alia*, "the encoding includes a data structure that proportionally represents the plurality of servers in accordance with the proportional server capability information." In response to this limitation, the Examiner alleges "Kawata et al shows a server is chosen based on the load status of the servers." The Examiner fails, however to show any instance where Kawata teaches or suggests "a data structure that proportionally represents the plurality of servers in accordance with the proportional server capability information." For at least this independent reason, claim 33 should be allowable.

Claim 60 recites, *inter alia*, "a first sequence of instructions to update a proportional server capability load balancing information encoding including indications for each server that reflect proportional measured sample request based capabilities of a plurality of servers, the reflection represented by relative occurrence of the indications for each server." Again, as with claims 1, 14, 26, 37, 53 and 67, there is a recitation of proportional capabilities of a plurality of servers. Such a limitation is not taught or suggested by Kawata. Kawata is silent as to the idea of a proportional server capability load balancing information encoding. Kawata is further silent as to the idea of the encoding including indications for each server that reflect proportional measured sample request based capabilities of a plurality of servers. Finally, Kawata does not teach or suggest that such a reflection would be represented by relative occurrence of the indications for each server.

For at least this reason, claim 60 should be allowable over the prior art of record. Claims 62-63 and 65 should be allowable based at least on their dependency from allowable claim 60.

Claims 7, 22, 31-32 and 64 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kawata in view of Leighton. Leighton, however, does not cure the noted deficiencies of Kawata with respect to the independent claims from which these claims depend. Accordingly, claims 7, 22, 31-32 and 64 should be allowable over the prior art of record based at least on their dependency from allowable independent claims.

Claims 71-76 are also believed to be allowable over the prior art of record.

For at least the reasons presented herein, all claims are believed to be in condition for allowance. If the Examiner has any questions, the Examiner is invited to contact the undersigned at the number provided below. Favorable reconsideration and allowance are requested.

The Petition fee of $130 pursuant to 37 C.F.R. § 1.17(a)(1) is being charged to our Deposit Account No. 02-3978 via electronic authorization submitted concurrently herewith.   Please charge any additional fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978.

Respectfully submitted,

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